

Application Serial No. 09/337,356 has been allowed, but has not yet issued. Applicant will submit the U.S. Patent Number once it becomes available.

In the Claims

Please cancel claims 1-27. Please add claims 28 - 52 as follows.

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28. A method of manufacturing a composite golf club shaft, comprising the steps of:
- filament winding or sheet rolling a plurality of fiber reinforced graphite plies around a mandrel to form a shaft core;
 - filament winding at least one outer ply having metal-coated fibers around said core, wherein said metal-coated fibers are coated with a metal chosen from the group consisting of: nickel, titanium, platinum, zinc, copper, brass, tungsten, cobalt, gold and silver; and,
 - placing a scrim layer around said at least one outer ply.

29. The method of claim 28 wherein said at least one filament wound ply with metal-coated fibers is wound to uniformly add an amount of weight to said shaft.

30. The method of claim 28 wherein said at least one outer ply having metal-coated fibers is uniformly filament wound over a portion of said shaft to concentrate an amount of weight in a location on said shaft.

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31. The method of claim 30 wherein said shaft has length and a hosel portion and wherein said outer ply having metal-coated fibers is uniformly filament wound around said hosel portion for a distance approximately one third or less of the shaft's length.

32. The method of claim 30 wherein said shaft has length and a grip portion and wherein said outer ply having metal-coated fibers is uniformly filament wound around said grip portion for a distance approximately one third or less of the shaft's length.

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33. A composite golf club shaft, comprising:

- a) a core formed on a mandrel of one or more filament wound or sheet-rolled fiber reinforced plies to form a shaft with a length and a hosel portion;
- b) an outer layer formed around said core including at least one filament wound ply having nickel-coated fibers;
- c) wherein said at least one filament wound ply with nickel-coated fibers is uniformly wound around said hosel end portion for a distance approximately one third or less of the shaft's length to uniformly add an amount of weight to said shaft; and,
- d) a scrim layer placed around said outer layer.

34. A composite golf club shaft, comprising:

- a) a core formed on a mandrel of one or more filament wound or sheet-rolled fiber reinforced plies;
- b) an outer layer formed around said core including at least one filament wound ply having metal-coated fibers;

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- c) wherein said at least one filament wound ply with metal-coated fibers is wound to uniformly add an amount of weight to said shaft, wherein said metal is chosen from the group consisting of: nickel, titanium, platinum, zinc, copper, brass, tungsten, cobalt, gold and silver; and,
- d) a scrim layer placed around said outer layer.

35. The composite golf club shaft of claim 34 wherein said core is formed of non-metal-coated fiber plies.

36. The golf club shaft of claim 34 wherein at least one ply in said core includes metal coated fibers.

37. The composite golf club shaft of claim 34 wherein said at least one metal-coated filament wound ply in said outer layer has a metal content between about ten percent and about sixty percent by weight.

38. The composite golf club shaft of claim 37 wherein said at least one metal-coated filament wound ply in said outer layer has a metal content between about twenty percent and about twenty-six percent by weight.

39. The composite golf club shaft of claim 34 wherein said at least one metal-coated filament wound ply in said outer layer is wound at an angle between about five degrees and about twenty-five degrees from the longitudinal axis of the body.

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40. The golf club shaft of claim 34 wherein said at least one metal-coated filament wound
ply in said outer layer is wound in a diamond pattern.

41. The golf club shaft of claim 34 wherein said metal is nickel.

42. The golf club shaft of claim 34 wherein said metal is copper.

43. The golf club shaft of claim 34 wherein said at least one metal-coated filament wound
ply in said outer layer is uniformly wound over a portion of said shaft to concentrate an amount
of weight in a location on said shaft.

44. The golf club shaft of claim 43 wherein said shaft has a length and a hosel portion
and wherein said amount of weight is concentrated in the hosel portion of said shaft.

45. The golf club shaft of claim 44 wherein said metal-coated filament is uniformly
wound around said hosel end portion for a distance approximately one third or less of the shaft's
length.

46. The golf club shaft of claim 43 wherein said shaft has a length and a grip portion and
wherein said amount of weight is concentrated in the grip portion of said shaft.

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47. The golf club shaft of claim 44 wherein said metal-coated filament is uniformly wound around said grip portion for a distance approximately one third or less of the shaft's length.

48. A composite golf club shaft, comprising:

- a) a core having a length formed on a mandrel of one or more filament wound or sheet-rolled fiber reinforced plies;
- b) an outer layer including at least one sheet rolled ply having metal-coated fibers formed around a portion of said core for a distance approximately one third or less of the core's length;
- c) wherein said at least one sheet rolled ply with metal-coated fibers is wound to uniformly add an amount of weight to said shaft, wherein said metal is chosen from the group consisting of: nickel, titanium, platinum, zinc, copper, brass, tungsten, cobalt, gold and silver; and,
- d) a scrim layer placed around said outer layer.

49. The shaft of claim 48 wherein said core has a hosel portion and said at least one sheet rolled ply having metal-coated fibers is wound around said hosel portion.

50. The shaft of claim 48 wherein said core has a grip portion and said at least one sheet rolled ply having metal-coated fibers is wound around said grip portion.